

Claims:

1-5. (Cancelled)

6. (Previously presented) The system of Claim 16, wherein said mat material further comprises a type of material selected from the group consisting of woven, mesh like, fibrous, cloth like, paper like, and combinations comprising at least one of the foregoing types of materials.

7. (Cancelled)

8. (Previously presented) The system of Claim 16, wherein said plurality of layers of material further are held together using a binder, wherein said binder further comprises a binder selected from the group consisting of a sealing agent, an adhesive, a ceramic substance, and combinations comprising at least one of the foregoing binders.

9. (Cancelled)

10. (Previously presented) The system of Claim 16, wherein said reflective surface further comprises a coating, wherein said coating further comprises a white opaque material.

11-15. (Cancelled)

16. (Currently amended) A fuel reformer system, comprising:
a housing having an inlet and an outlet;
a mat material fluidly coupled to and downstream of said inlet, said mat material comprising a plurality of layers of a ceramic fibrous material and having a reflective surface facing the inlet that provides a mixing zone fluidly coupled to said mat material; and

a reforming zone downstream of said mat material and mixing zone, comprising a reformer catalyst substrate and a reformer catalyst.

17-19. (Cancelled)